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Federal Communications Commission
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RE: MM Docket No. 87-268

The City of Mesa, Arizona hereby submits the following comments in response to the Commission's Sixth Further Notice of Proposed Rulemaking in the proceeding referenced above. Mesa offers these comments as a medium scale user of public safety radio services in the belief that this NPRM is a spectrum rather than strictly a broadcast issue. Mesa will limit its comments to only those portions of the NPRM where we believe a spectrum reallocation from broadcast to other uses is called for. We realize that this notice can not address the specifics of who would benefit from such a reallocation, but we believe we can address the basic need for a reallocation.

Mesa is Arizona's third most populated city with an estimated 340,000 permanent residents. For almost six months of the fall-winter-spring seasons, Mesa's population swells by almost 100,000 part time residents. Equally as critical to Mesa is the fact that we are a part of a metropolitan area of over 2.5 million people. Presently the incorporated area of Mesa is almost 123 square miles, and Mesa's planning area is just over 171 square miles. Mesa also centrally dispatches fire and emergency medical calls for two other adjacent jurisdictions adding about 100,000 more people and over 100 square miles of additional area of required radio system coverage. Mesa has over 1,000 people in its police department and 341 in its fire department. Mesa has 15 fire-ems stations, and the other fire agencies we dispatch have 9 more. Mesa operates over 3,000 land mobile radios.

The NPRM proposed a channel plan for digital television (DTV) wherein one part of the proposal is to explore the reallocation to other services of UHF television channels 60-69. Mesa strongly supports this portion of the NPRM. Mesa was a consistent participant in the Public Safety Wireless Advisory Committee (PSWAC) and supports the PSWAC conclusions including the main conclusions that public safety agencies are in desperate need of additional radio spectrum. We believe the channel 60-69 spectrum is a prime candidate for meeting part of those documented needs because of its proximity to the present LMR allocations immediately above 806 MHz.

Mesa feels the Commission has a primary obligation in all of its spectrum allocation deliberations to consider the impact of its decisions on the safety of life and property. Congress has repeatedly voiced its direction that radio services necessary for safety of life and property deserve a higher priority in allocating spectrum than those services which are more convenience or luxury in nature. We, therefore, believe that the Commission must look at this NPRM as a spectrum proceeding and consider the impact on public safety and not just the possible impact on television broadcasters.

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One of PSWAC's conclusions was that public safety must receive an allocation of 25 MHz of additional spectrum within the next five years. We are not able to identify any reserve spectrum usable by LMR so we believe the Commission must look for a reallocation to satisfy this need. Mesa suggests that 24 MHz of this requirement could appropriately come from a reallocation of a portion of channels 60-69. If this NPRM results in a reallocation, Mesa would respond in the appropriate process to state its own and public safety's case for public safety use of a portion of that spectrum.

The channel 60-69 spectrum would offer some very valuable relief for metropolitan public safety uses, but there is an equal need for new public safety spectrum in the 170-512 MHz area. More spectrum in these lower bands is needed to support the nation's need for an adequate number of interoperability channels, for wide area uses in the VHF band, and to allocate nearby virgin spectrum to allow clearing and refarming of the 150-160 MHz band.

In 1988 the Commission allocated 230, 800-MHz channels in the NPSPAC process. Although heavily used in metropolitan areas, these channels in fact have not materially been used in statewide systems as they were projected to be used. The reason for this is the greatly increased cost of 800 MHz trunking systems which must cover varied terrain and wide areas. The need for wide area efficient communications systems continues to escalate, but the cost of trunking and the need for so many more sites has proven that 800 MHz does not offer a viable wide area solution for everyone. No matter how much the Commission would like to see all of the nation's public safety groups operating under high density, high complexity 800 MHz trunking systems, it is not going to happen. Additional VHF spectrum is vital to nationwide interoperability and to wide area use. At the same time, because the fabric of existing systems in the 150-160 MHz band is woven so tightly, the only feasible way of increasing its efficiency substantially is to get virgin adjacent spectrum so that the existing band can actually be cleared to then refarm. Therefore, Mesa suggests that the Commission must consider modifying the DTV core channels to allow for the eventual reallocation of television channels 7, 8, and 9 to LMR for these purposes.

Mesa will issue an RFP in 1997 for a trunked 800 MHz system using the Project 25 standards. This system will be used by Mesa and all of its contiguous neighbors. In addition, Phoenix will be simultaneously installing two similar and compatible systems which will connect to the Mesa system. Our analysis says we could get adequate coverage using two sites at 450 MHz, but it will take four sites at 800 MHz just for the Mesa system. The difference is because of the ability to penetrate buildings throughout some 300 square miles. This difference pushes the cost up from an estimated \$5.5 million to \$8.2 million for infrastructure alone. If Mesa had access to a sufficient number of exclusive use frequencies below 512 MHz for this system, we could accommodate many more users at much less cost. For this reason, we also strongly urge the Commission to consider additional sharing nationwide of the lower UHF television channels 14-20 (470-512 MHz). Between Mesa and Phoenix, we are 20 frequencies short of the number of 800 MHz channels we need right now to handle existing traffic.

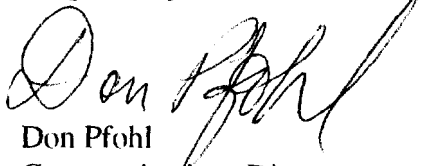
Mesa also strongly endorses the PSWAC recommendation that 2.5 MHz of spectrum should be quickly allocated solely for nationwide interoperability. We further believe that the best place for this would be a portion of television channel 7 (174-180 MHz.) Effectively the nation's public safety entities have no interoperability. Every large scale event reinforces this, and PSWAC recognized that

we must solve this problem going into the future. The nation's public safety agencies cannot afford to continue to be unable to communicate with each other in emergencies while excessive drivel is allowed to be aired by broadcast television.

In summary, Mesa suggests that the Commission should consider this proceeding fundamentally addresses a spectrum issue; television channels 60-69 should be identified for reallocation; the core DTV channels should be adjusted to also allow reallocation of VHF television channels 7, 8, and 9; and there should be a greatly expanded sharing by LMR of television channels 14-20 (470-512 MHz) nationwide.

Mesa appreciates the chance to offer its comments in this proceeding and applauds the Commission's proposed direction of identifying a smaller block of core television channels in order to look at reallocation of some existing television spectrum for other purposes. We believe the Commission's proposal is on the right track, but we feel it needs to be modified in light of public safety's needs for suitable LMR spectrum

Respectfully submitted,



Don Pfohl
Communications Director

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